

NHSN Antibiotic Use Reporting

Nationwide, approximately half of all patients admitted to a hospital will receive an antibiotic during their stay. In a ten state study of healthcare-associated infections and antibiotic use published in the Journal of the American Medical Association in 2014, Tennessee had the highest hospital antibiotic prescribing rates.¹ Minimizing unnecessary exposure to antibiotics will reduce the pressure for development of multi-drug-resistant organisms with few available treatment options and substantial associated morbidity or mortality.

Because Tennessee has among the highest antibiotic prescribing rates in the United States, mandated NHSN Antibiotic Use reporting by acute care hospitals is one crucial step towards optimizing antibiotic prescribing as part of the state's mission to protect, promote and improve the health of people in Tennessee. Mandatory reporting can be a key driver of quality improvement as was demonstrated in Tennessee by a 53% reduction in central line-associated bloodstream infections over five years and a 20% reduction in catheter-associated urinary tract infections over two years.

The National Healthcare Safety Network's (NHSN) Antibiotic Use and Resistance (AUR) module provides a mechanism for hospitals to report, benchmark, and analyze antibiotic use and/or resistance in an effort to reduce antimicrobial resistant infections and to minimize inappropriate antibiotic prescribing. The NHSN Antibiotic Use (AU) Option was released in 2011. The primary objective is to provide risk adjusted inter- and intra-facility benchmarking of antimicrobial usage. A secondary objective is to evaluate trends of antimicrobial usage over time. NHSN AU reporting is currently voluntary for acute care hospitals enrolled in

NHSN. As of October 1, 2018 23% of Tennessee hospitals are already reporting into the NHSN AU module. For those hospitals not yet reporting, the decision to and preparation for reporting are complex. There is no mechanism for manual or "by hand" reporting into the NHSN AU Option; reporting is done through either a commercial or home-grown surveillance software system. The process, including necessary validation, can take anywhere from **6 to 18 months**.

The following phased-in approach for mandating hospital AU reporting into the NHSN AU Option is proposed:

- Acute Care Hospitals with a total bed size of >250: First month submitted by January 1, 2021
- Acute Care Hospitals with a total bed size between 100–250: First month submitted by January 1, 2022
- Acute Care Hospitals with a total bed size of < 100 and Critical Access Hospitals: First month submitted by January 1, 2023.

Resources:

Compatible surveillance software systems: <https://www.sidp.org/aurvendors>
NHSN AUR Roadmap for Reporting: <https://www.cdc.gov/nhsn/training/roadmap/psc/aur.html>
NHSN AUR Protocol: <https://www.cdc.gov/nhsn/pdfs/pscmannual/11pscaurcurrent.pdf>
NHSN CDA Submission Portal: <https://www.cdc.gov/nhsn/cdaportal/index.html>

Please contact HAI.health@tn.gov with questions

¹JAMA. 2014; 312(14): 1438-1446.